

C1
-W-S-Q-C-S-V-T-C-G- (SEQ ID NO:4),

-W-S-P-W-S-E-W-T-S-C-S-T-S-C-G-N-G-I-Q-Q-R-G-R- (SEQ ID NO:15),

-W-S-H-W-S-P-W-S-S-C-S-V-T-C-G-D-G-V-I-T-R-I-R- (SEQ ID NO:16),

-W-G-P-W-S-P-W-D-I-C-S-V-T-C-G-G-G-V-Q-K-R-S-R- (SEQ ID NO:17),

-W-S-Q-C-S-V-Y-C-G- (SEQ ID NO:18),

-T-E-W-S-A-C-S-K-S-C-G-M-G-F-S-T-R-V-T-N-R-N- (SEQ ID NO:19), and

-T-E-W-S-A-C-S-K-T-C-G-M-G-I-S-T-R-V-T-N-D-N- (SEQ ID NO:20).

2. (Amended) The peptide according to claim 1, wherein said A₁ is Pro or -X₁-W-X₂-X₃- (SEQ ID NO:5), X₁, X₂, and X₃ being chosen, independently of each other, from G, S and C.

3. (Amended) The peptide according to claim 2, wherein said A₁ is -X₁-W-S-X₃- (SEQ ID NO:6).

4. (Amended) The peptide according to claim 1, wherein said A₂ is selected from the group consisting of -R-S-, -V-S-, and -V-T-.

5. (Amended) The peptide according to claim 1, wherein said peptide comprises at least the following amino acid sequence:

-W-S-X₁-W-S-X₂-C-S-A₂-C-G- (SEQ ID NO:7).

6. (Amended) The peptide according to claim 1, wherein said peptide comprises the following amino acid sequence:

-W-S-G-W-S-S-C-S-R-S-C-G- (SEQ ID NO:8).

7. (Amended) The peptide according to claim 1, wherein said peptide comprises the following amino acid sequence:

-W-S-A₁-C-S-A₂-C-G-Z- (SEQ ID NO:9)

C1
But D3
in which Y and Z constitute the N- and C-terminal ends of the peptide, comprise amino acid chains having less than 6 amino acids or comprise chains of compounds that are not amino acids.

8. (Amended) A pharmaceutical composition comprising a peptide according to claim 1 and a pharmaceutically acceptable vehicle.

9. (Twice Amended) A method for regenerating nervous system cells, comprising contacting the cells with an effective amount of a peptide according claim 1.

10. (Twice Amended) A method for treating a neurodegenerative disease, said method comprising administering to a patient with said neurodegenerative disease an effective amount of a peptide according claim 1.

11. (Twice Amended) A method for treating a pathological condition or trauma requiring the regeneration of nervous system cells, said method comprising administering to a patient with said pathological condition or trauma an effective amount of a peptide according to claim 1.

12. (Twice Amended) A method for treating a neuroblastoma, said method comprising administering to a patient with said neuroblastoma an effective amount of a peptide according to claim 1.

13. (Twice Amended) An additive for culturing nerve cells, comprising a peptide according to claim 1.

14. (Twice Amended) A cellular expression vector, comprising a nucleic acid sequence expressing a peptide according to claim 1.

15. (Amended) The cellular expression vector according to Claim 14, wherein said vector comprises SEQ ID NO: 10.

Sequence Listing

✓ Please insert the Sequence Listing filed concurrently herewith and renumber pages 1-10 of the Sequence Listing as pages 18-27. In addition, please delete the Sequence Listing filed on November 1, 2001.